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SIMMONS, PERRINE, ALBRIGHT & ELLWOOD, P.L.C.
THIRD FLOOR TOWER PLACE
22 SOUTH LINN STREET
IOWA CITY, IA 52240

EXAMINER

ADDIE, RAYMOND W

ART UNIT PAPER NUMBER

3671

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/605,249

Applicant(s)

MUSIL ET AL.

Examiner

Raymond W. Addie

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/17/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1-10, 12-14, 16-20 are objected to because of the following informalities:

Ins. 10-12 appear to be missing a phrase or limitation, since "said chassis and said driver station when said hopper is filled with road paving material and said driver station is occupied by a driver;" is an incomplete statement.

Appropriate correction is required.

For examination; the cite recitation is seen to read as --said hopper is intended to be filled with road paving material and the driver station is intended to be occupied by a driver or operator--.

Claims 2-10, 12-14, 16-20 the phrase "A" should be --[tab] the--.

Claim 19, the phrase "A system of claim 18"; should be --[tab] The road paving system--

In order to be consistent with claims 17, 19, 20.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-6, 10-12 are rejected under 35 U.S.C. 102(a) as being anticipated by Olson #

6,481,925 B1.

Olson discloses a road paving tractor (10) comprising:

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A chassis (12) having a front end (20) and a rear end (22).

A hopper (24) mounted on the front end (20), able to be filled with paving material.

A driver station comprising a driver seat and a steering control console, for an operator,
and disposed on said rear end (22) of the chassis (12).

An engine and drive train (unnumbered) coupled to said hopper and configured to
provide propulsion of said hopper via a propulsion arrangement (14).

Means (42) for moving paving material from said hopper toward said rear end, such that
said paving material is not dribbled below said tractor as a material conveyor (40)
loops underneath said tractor.

Attachment coupling means (32, 36) coupled to said chassis rear end (22). Said
coupling means (32, 36) configured to temporarily receive one of a plurality of
detachable road paving tool attachments (34) and said chassis, hopper engine driver
station and moving means being "free from attachment to any paving screed, road
widening strike-off blade, and radially and vertically adjustable material mover, of a type
configured to move paving material at an upward angle away from said rear end,
When said attachment coupling means is not coupled to any of said plurality of
detachable road paving tool attachments (34). See Figs. 1-5; Col. 2, ln. 22-col. 4, ln.
17. Emphasis on Col. 3, ln. 59-col. 4, ln. 17.

In regards to Claims 2-6, 10 Olson explicitly discloses the advantages of providing an
attachment coupling means (32, 36) in order to increase the utility of a single prime

mover (10), by reducing the number of individual vehicles and operators necessary to utilize each of the now detachable road paving implements, such as a paving screed attachment (34) see Fig. 5; a hot mix asphalt transfer tool attachment (80) comprising a elevating means (86), in the form of a vertically swinging slat conveyor (86), see Fig. 4; and a road widening attachment (100) comprising a road widener strike-off blade (106) A road widener end gate (unnumbered, see lower section of Fig. 5), end-gate angle control link, and a road widener strike-off blade angle control link (108).

In regards to Claim 11 Olson discloses a method of deploying multi-use road paving equipment comprising the steps of:

Providing a paving tractor with a 1st detachable road paving tool attachment (100)

operatively coupled thereto at a 1st connection point that is on a vertically adjustable pull arm (illustrated at the lower portion of Fig. 5 as being attached to strike-off blade (106)).

Replacing said 1st tool attachment (100) with any of a plurality of second detachable road paving tool attachments (70 or 80) without welding or cutting metal at said 1st connection point.

Where said 1st detachable road paving tool attachment (100) is configured to perform a substantially different task than said 2nd tool attachments.

Wherein said paving tractor (10) is a self-propelled vehicle configured to be driven by a driver located on and at a rear end (22) of the paving tractor (10) said paving tractor

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further comprising a hopper (24) disposed forward of said rear end (22), and means (40) for conveying paving material from said hopper to said rear end. See col. 3, ln. 59-col. 4, ln. 17.

In regards to Claim 12 Olson explicitly discloses a method for attaching/detaching the various detachable paving tool attachments (34) to the tractor (10), to accommodate specific road paving tasks. Although Olson does not disclose lowering the attachments (34) onto a support surface, which is not the ground; it would be inherent to one of ordinary skill at the time the attachment(s) were being disconnected from the tractor (10); to place the attachment, such as (100) being disconnected, onto a support surface, other than the ground, via vertically adjustable pull arms, in order to increase safety and minimize change-out time of each attachment.

3. Claims 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Macku et al. # 6,071,040.

Macku et al. discloses a paving system (1) comprising:

A road paving tractor (3).

A chassis having a front and rear end.

A hopper (7) for receiving and containing road paving material, and is disposed
at and coupled to said front end.

A plurality of paving material moving augers disposed at least in part, in said hopper, for moving paving material from said hopper toward said rear end.

An engine, coupled to said chassis for providing motive force to propel said road paving tractor.

Vertically adjustable arms coupled to said chassis for providing movement of a connection point at a rear end thereof.

A hydraulic system, coupled to said chassis and receiving power from said engine, said hydraulic system for vertical adjustment of said vertically adjustable arm.

See Fig. 1.

At least one detachable road paving tool attachment (11), such as a screed, configured to mate with said connection point of said adjustable arm.

Said screed (11) further configured to be attachable and detachable from said connection point without either welding and cutting any structural metal components of at least one of said paving tractor and said paving tool attachment.

See Col. 3, ln. 26-col. 4, ln. 52; Fig. 1.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-15, 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Macku et al. # 6,071,040 in view of Olson # 6,481,925 B1.

Macku et al. discloses a method of deploying a road paving machine (1) comprising the steps of:

Providing a paving tractor (3) with a 1st detachable road paving tool (11) operatively coupled thereto at a 1st connection point such as on tow arms, see Fig. 1.

Wherein said paving tractor (3) is a self-propelled vehicle configured to be driven by a driver located on and at a rear end of said paving tractor. Said paving tractor further comprising a hopper (7) disposed forward of said rear end and means (5) for conveying paving material from said hopper to said rear end. See col. 3, ln. 56-col. 4, ln. 52.

What Macku et al. does not disclose is replacing the 1st detachable paving tool attachment (11) with a 2nd and different type of paving tool attachment.

However, Olson discloses it is desirable to provide a paving tractor with a plurality of interchangeable road paving implements without welding, or cutting metal at the connection point.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the method of deploying a paving machine of Macku et al., with the step of interchanging detachable road paving implements from a paving tractor, as taught by Olson, in order to maximize the utility of the paving machine.

In regards to Claims 12-14 Macku et al. discloses the use of paving machine, having a paving screed (11) detachably mounted to a pair of vertically adjustable tow arms (see fig. 1), which are powered by an engine mounted on the paving machine (1) but does not disclose replacing the screed with a different paving tool. However, Olson teaches a method for attaching/detaching the various detachable paving tool attachments (34) to the tractor (10), to accommodate specific road paving tasks. Although Olson does not disclose lowering the attachments (34) onto a support surface, which is not the ground; it would be obvious to one of ordinary skill at the time the attachment(s) were being disconnected from the tractor (10); to place the attachment, such as (100) being disconnected, onto a support surface, other than the ground, via vertically adjustable pull arms, in order to increase safety and minimize change-out time of each attachment. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the method of deploying a paving machine of Macku et al., with the steps of disconnecting a 1st paving tool and attaching a 2nd paving tool to the paving tractor, as taught by Olson in order to maximize the utility of the paving tractor.

In regards to Claim 15 Macku et al. discloses a road paving system comprising:

A road paving tractor (3) further comprising:

A chassis having a front and rear end.

A hopper (7) for receiving and containing road paving material, and is disposed
at and coupled to said front end.

A plurality of paving material moving augers disposed at least in part, in said hopper, for
moving paving material from said hopper toward said rear end.

An engine, coupled to said chassis for providing motive force to propel said road paving
tractor.

Vertically adjustable arms coupled to said chassis for providing movement of a
connection point at a rear end thereof.

A hydraulic system, coupled to said chassis and receiving power from said engine, said
hydraulic system for vertical adjustment of said vertically adjustable arm.

See Fig. 1.

At least one detachable road paving tool attachment (11) configured to mate with said
connection point of said adjustable arm. Such that manipulation of said vertically
adjustable arm, via said hydraulic system, results in at least a vertical
displacement of the at least one detachable road paving tool attachment.

Wherein said at least one detachable paving tool attachment further configured when
coupled to said vertically adjustable arm to cause road paving material in contact
therewith, to be relocated in a predetermined manner.

Further wherein said at least one detachable paving tool attachment is operatively attachable and detachable to said connection point without either welding and cutting any structural metal components of the paving tractor or the at least one detachable paving tool.

What Macku et al. does not disclose is the use of a plurality of detachable paving tools. However, Olson teaches it is desirable to increase the utility of a single prime mover (10), by reducing the number of individual vehicles and operators necessary to utilize each of the now detachable road paving implements, such as a paving screed attachment (34) see Fig. 5; a hot mix asphalt transfer tool attachment (80) comprising a elevating means (86), in the form of a vertically swinging slat conveyor (86), see Fig. 4; and a road widening attachment (100) comprising a road widener strike-off blade (106) A road widener end gate (unnumbered, see lower section of Fig. 5), end-gate angle control link, and a road widener strike-off blade angle control link (108).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the paving machine of Macku et al. with a plurality of detachable paving tool attachments, as taught by Olson, in order to reduce the number of prime movers and operators necessary to perform individual road paving tasks.

See Olson cols. 3-4.

In regards to Claims 19, 20 Macku et al. discloses a paving tractor (3) having a driver seat and hydraulic controls, see Figs. 1, 4, 6, 7, having a detachable paving screed (11) attached thereto, via tow arms, but does not disclose providing a detachable road widening attachment. However, Olson teaches it is desirable to increase the utility of a single prime mover (10), by reducing the number of individual vehicles and operators necessary to utilize each of the now detachable road paving implements, such as a paving screed attachment (34/70) see Fig. 5; and a road widening attachment (100) comprising a road widener strike-off blade (106), a road widener end gate (unnumbered, see lower section of Fig. 5), end-gate angle control link, and a road widener strike-off blade angle control link (108).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the paving machine of Macku et al. with a plurality of detachable paving tool attachments, as taught by Olson, in order to reduce the number of prime movers and operators necessary to perform individual road paving tasks. See Olson cols. 3-4.

5. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olson # 6,481,925 B1 in view of Brock et al. # 5,035,534.

Olson discloses it is desirable to provide a paving machine (10) with a plurality of detachable paving tool attachments, to include screeds, road wideners and hot mix transfer attachment (80). What Olson does not disclose is whether the hot mix transfer

attachment (80) can swing horizontally as well as vertically. However, Brock et al. teaches it is known to provide hot mix asphalt transfer devices (10) with at least one vertically and horizontally swinging slat conveyors (65), such that the discharge end of conveyor (65) may be swung beyond the lateral extremities of the transfer device (10). Therefore, it would have been obvious to provide the mix transfer attachment of Olson with a horizontally and vertically swing able slat type conveyor, as taught by Brock et al., in order to place the discharge end of the conveyor at a desired location relative to the paving tractor.

See Figs. 1, 2; Col. 5, Ins. 1-12.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Campbell # 5,533,829 discloses a paving machine. Roth # 6,712,549 B2 discloses a paving machine. Heims US 2003/0113166 A1 discloses a paving machine. Reed # 5,553,969 discloses a paving apparatus. Ferguson et al. # 5,201,604 discloses a paver having screed adjustment devices. Hepburn # 2,067,236 discloses a mixing machine. Soliman et al. # 5,269,626 discloses a paving machine. Richter # 6,514,007 B2 discloses a paving machine. Ruggles et al. # 6,422,785 B1 discloses a track belt placer. Gilmore et al. # 5,522,670 discloses a hitching mechanism. Brisbin et al. # 3,279,824 discloses a truck hitch paving screed. Moore # US 2003/0219309 A1 discloses a paving device for attachment to a tractor.

Rhoden # 6.308,785 B1 discloses an adjustable grader-spreader bar for attachment to tractors. Ohseki et al. # 6,595,719 B1 discloses a screed device/road widening system.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond W. Addie whose telephone number is 703 305-0135. The examiner can normally be reached on 8-2, 6-8.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 703 308-3870. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thomas Will
Supervisory Patent Examiner
Group 3600

RWA
9/30/2004